We claim:

1. An on-line method of classifying IP addresses into related clusters within a distributed information network, the method comprising the steps of:

receiving a plurality of IP addresses;

processing the plurality of IP addresses according to a radix encoded trie classification process; and

classifying the plurality of IP addresses into related clusters.

2. The method of claim 1, wherein the plurality of client IP addresses are received from one or more network routers.

3. The method of claim 1, wherein the IP addresses are network client IP addresses.

4. The method of claim 1, wherein the distributed information network is the World Wide Web.

5. A method for on-line grouping of a plurality of Web client IP addresses into related client clusters, the method comprising the steps of:

extracting client IP addresses from a collection of IP addresses;

performing longest prefix matching on each client IP address; and

classifying all of the client IP addresses that have the same longest matched prefix into a client cluster based on a radix encoded trie matching process.

6. The method of claim 1, wherein the client IP addresses are extracted in real time from a network server.

7. The method of claim 1, wherein the distributed information network is the Internet.

8. A method for determining the relationships between a plurality of client IP addresses, the method comprising:

processing the plurality of client IP addresses according to a radix encoding trie (retrie); and

grouping all of the client IP addresses which share the common longest prefix matching into at least one client IP grouping.

9. The method of claim 8, further comprising:

receiving the plurality of client IP addresses from one or more network servers.

10. The method of claim 8, wherein the network servers are at least one of proxy servers, cache servers, content distribution servers and mirror servers.

11. The method of claim 8, wherein the at least one IP address is a client IP address.

12. The method of claim 8, wherein the at least one IP address is a server IP address, wherein the cluster is a server cluster.

13. The method of claim 8, wherein the retrie includes shift, mask values which are combined into a single value in a predecessor table.

14. The method of claim 8, wherein the elements in a last retrie table level contain only a next hop index so as to decrease the retrie table size.

15. The method of claim 8, wherein the retrie includes a fixed number of retrie levels.

16. The method of claim 8, wherein the number of retrie levels is fixed at two levels.

17. A computer-readable medium containing executable instructions which cause a computer to perform the steps of:

extracting at least one IP address;

performing longest prefix matching on the at least one IP address; and

classifying the at least one IP address into a cluster, wherein the longest prefix matching is performed according to a radix-encoded trie.

18. The computer-readable medium of claim 17, wherein the at least one IP address is a client IP address.

19. The computer-readable medium of claim 17, wherein the at least one IP address is a server IP address, wherein the cluster is a server cluster.

20. The computer-readable medium of claim 17, wherein the radix encoded trie is described by the equation:

while(! ((r=r—>tablel(x>>r—>shift)&r—>mask] )&1)

where x is the search key and r is the radix encode trie.